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| APPLICATION NO | . F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|------------|------------|----------------------|------------------------|------------------|
| 10/505,417 | 08/24/2004 | | Hiroshi Kaneta | 8017-1141 | 7384 |
| 466 | 7590 | 12/15/2005 | | EXAMINER | |
| YOUNG (| | | LEE, CYNTHIA K | | |
| 745 SOUT 2ND FLOO | | TREET | | ART UNIT | PAPER NUMBER |
| ARLINGTON, VA 22202 | | | | 1745 | |
| | | | | DATE MAILED: 12/15/200 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | <i>}</i> | | | | | | |
|--|---|--|---|--|--|--|--|--|
| | Application No. | Applicant(s) | | | | | | |
| | 10/505,417 | KANETA ET AL. | | | | | | |
| Office Action Summary | Examiner | Art Unit | _ | | | | | |
| | Cynthia Lee | 1745 | | | | | | |
| The MAILING DATE of this communication a Period for Reply | appears on the cover sheet | vith the correspondence address | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory peri Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUN 1.136(a). In no event, however, may od will apply and will expire SIX (6) Mo tute, cause the application to become | IICATION. a reply be timely filed DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). | | | | | | |
| Status | | | | | | | | |
| 1) Responsive to communication(s) filed on 24 | August 2004. | | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Ti | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | | |
| 3) Since this application is in condition for allow | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| closed in accordance with the practice unde | r <i>Ex par</i> te Quayle, 1935 C | D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | | |
| 4)⊠ Claim(s) <u>1-14</u> is/are pending in the application | on. | | | | | | | |
| 4a) Of the above claim(s) is/are withd | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-14</u> is/are rejected. | ☑ Claim(s) <u>1-14</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | | |
| 8) Claim(s) are subject to restriction and | d/or election requirement. | | | | | | | |
| Application Papers | | | | | | | | |
| 9) ☐ The specification is objected to by the Exam | iner. | | | | | | | |
| 10)⊠ The drawing(s) filed on 24 August 2004 is/ar | e: a)⊠ accepted or b)□ ∈ | objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | he drawing(s) be held in abey | ance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the corr | | | | | | | | |
| 11) ☐ The oath or declaration is objected to by the | Examiner. Note the attach | ed Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for forei a)⊠ All b)□ Some * c)□ None of: | gn priority under 35 U.S.C. | § 119(a)-(d) or (f). | | | | | | |
| Certified copies of the priority docume | 1. Certified copies of the priority documents have been received. | | | | | | | |
| | | | | | | | | |
| 3. Copies of the certified copies of the p | • | n received in this National Stage | | | | | | |
| application from the International Bure | • | ot received | | | | | | |
| * See the attached detailed Office action for a l | ist of the certified copies he | n received. | | | | | | |
| Attachment(s) | | | | | | | | |
| 1) Notice of References Cited (PTO-892) | | v Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/INDIANA (INDIANA (IN | 08) 5) 🔲 Notice o | o(s)/Mail Date f Informal Patent Application (PTO-152) | | | | | | |
| Paper No(s)/Mail Date <u>8/24/2004</u> . | 6) 🔲 Other: _ | · | | | | | | |

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Priority

Acknowledgement has been made of applicant's claim for priority under 35 USC 119 (a-d). The certified copy has been filed on 8/24/2004.

Preliminary Amendment

The claims filed 8/24/2004 has been placed in the application file and the information referred to therein has been considered as to the merits.

Information Disclosure Statement

The Information Disclosure Statement (IDS) filed 8/24/2004 has been placed in the application file and the information referred to therein has been considered.

Drawings

The drawings received 8/24/2004 are acceptable for examination purposes.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 7, 9, 10, 13, and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Maki (JP 2002-117819).

Maki discloses a flat secondary battery comprising an anode, a cathode, and positive and negative electrode terminals for charge and discharge, the terminals extended from said positive and negative electrode collectors, and a third terminal formed perpendicular to the direction of the positive and negative electrodes. The third

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terminal possesses a temperature detecting sensor (26 on fig. 7). The battery is encased in a laminate with aluminum foil. (abstract, [0013, 0014])

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maki as applied to claim 1 above and is incorporated herein. Although Maki does not disclose a alternating stack of anode elements and cathode elements with a separator sandwiched in between, it is standard in the art to alternatively stack anode elements and cathode elements with a separator sandwiched in between for the purpose of increasing the cell voltage. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to alternatively stack anode elements and cathode elements with a separator sandwiched in between for the benefit of increasing the cell voltage.

Claims 5, 8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki as applied to claim 1 above and incorporated herein, and further in view of Higashijima (US 5886502).

Maki does not disclose a third terminal connected to a cell balancer circuit.

However, Higashijima discloses a cell balancer circuit connected to cells connected in series to detect difference in voltage among the cells. Thus, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to add a cell balancer circuit to the cell terminal for the benefit of detecting the voltage of the cells and achieving a balance of voltages among the cells, as taught by Higashijima (abstract, 1:5-10, 2:40-45).

Conclusion

The X references cited on the International Search Report were considered relevant to the applicant's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RAYMOND ALEJANDRO PRIMARY EXAMINER